



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,443	09/28/2001	Man Keon Oh	HI-036	1679
34610	7590	02/22/2006	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			SCUDERI, PHILIP S	
			ART UNIT	PAPER NUMBER
			2153	
DATE MAILED: 02/22/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/964,443		OH, MAN KEON	
	Examiner		Art Unit	
	Philip S. Scuderi		2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,6,8,10,14-22 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,6,8,10,14-22 and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in response to the communication filed on 22 November 2005.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

The indicated allowability of claims 23-26 is withdrawn in view of the newly discovered reference to Sitaraman et al. Rejections based on the newly cited reference(s) follow. Accordingly, this action is non-final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 8, 10, 14, 17, 18, 20, 21, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (hereinafter "AAPA") in view of U.S. Patent No. 6,243,749 (hereinafter "Sitaraman").

AAPA teaches the embodiments described in the section of the specification titled "Background of the Related Art" and shown in figures 1 and 2, which appears to be an Internet

Art Unit: 2153

phone or VoIP switching system. AAPA states that a prearranged number of IP addresses are respectfully allocated, by an operator, to internet connection systems (paragraph 2) and that the internet connection systems allocate the IP addresses to the users (paragraph 6).

Sitaraman teaches that the dramatic increase of the popularity of the Internet has created a concern about the number of available IP addresses (column 2, line 66 – column 3, line 5) and teaches a system for mitigating these concerns (column 3, lines 6-20). Sitaraman's system is similar to the admitted art (AAPA) and comprises distributed nodes (column 3, lines 62-67) that dynamically assign IP addresses (column 3, lines 6-20) and can be used for providing Internet phone or VoIP services (column 3, lines 30-43). However, Sitaraman's system cannot take full advantage of the available IP addresses because this type of system has problems revoking dynamically allocated IP addresses (column 4, lines 1-8). Sitaraman's solution to this problem is to provide a broker that dynamically allocates and returns all the IP addresses to the distributed nodes (column 4, lines 14-33).

Given the teachings of Sitaraman, that Sitaraman discloses that the solution discussed above can be applied to any type of network (column 6, lines 18-25), and that AAPA teaches a system with similar deficiencies, (as discussed above), it would have been obvious to apply Sitaraman's solution to the admitted art (AAPA) by providing a similar broker server, thereby taking full advantage of available IP addresses.

Regarding to claim 1, AAPA teaches the switch unit, call processing unit, number translating unit, etc. and Sitaraman teaches a broker server that allocates and returns IP addresses etc. The collective group of internet connection systems reads on the claimed database. The combination of AAPA in view of Sitaraman discussed above reads on the remaining claims for obvious reasons.

Art Unit: 2153

Claims 3, 8, 15, 16, 19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Sitaraman as set forth above, and further in view of examiner's official notice.

AAPA in view of Sitaraman does not teach the format that IP addresses are stored. Sitaraman teaches that distributed nodes maintain a list of allocated and revoked IP addresses (column 5, lines 46-62), thus it would have been obvious for the internet connection systems to do so for the same reasons discussed above. However, the combination of AAPA in view of Sitaraman set forth above does not teach that each stored record comprises fields A, B, C, and D that specifically discriminate the IP addresses, and a flag indicating a validity or invalidity of the corresponding IP address.

The examiner takes official notice that IP addresses stored as four byte fields were well known in the art. Given this information, it would have been obvious to one of ordinary skill in the art to store the IP addresses in such a way, thereby storing the addresses in their native format and eliminating any extra conversion logic that would slow performance.

The examiner takes official notice that certain IP addresses are reserved (e.g., 127.0.0.1 is reserved for loopback). Given this information, it would have been obvious to provide a validity flag, thereby assuring reserved addresses are not allocated.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

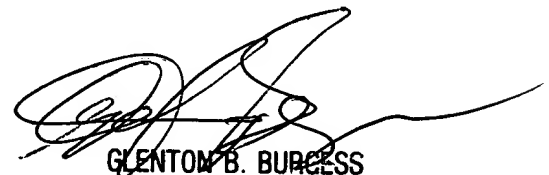
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip S. Scuderi whose telephone number is (571) 272-5865. The examiner can normally be reached on Monday-Friday 9:00 am - 5:30 pm.

Art Unit: 2153

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PS



GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100